

Response Under 37 C.F.R. §1.111
U.S. Appln. No. 09/500,446

et al, U.S. Patent 6,284,360 (newly cited) and further in view of Ehrenberg et al, U.S. Patent 3,943,678 (newly cited).

Applicants respectfully submit that the present invention is not obvious over the disclosures of EP 0816462 in view of Johnson et al and further in view of Ehrenberg et al and request that the Examiner reconsider and withdraw this rejection in view of the following remarks.

As recognized by the Examiner, EP 0816462 does not disclose the claimed cellular structure of foamed structure (structure having closed cells or both closed cells and open cells); the pressure-sensitive adhesive layer which is of a multi-layer structure including the “subbing layer”; and the structure in which a different pressure-sensitive adhesive layer is provided on the opposite side.

The Examiner asserts that Johnson et al teaches that the tie or primer layer is provided between the foamed structure and the pressure-sensitive adhesive layer. While Johnson et al discloses a tie or primer layer, this tie or primer layer is provided for the purpose of enhancing the adhesion between the pressure-sensitive adhesive layer and the foamed structure layer. That is, Johnson et al describes that enhancement of the adhesive force between the respective layers increases the possibility that the breaking mode becomes cohesive failure in the center of core, and not the breakage in the interface between the tape and the substrate. Further, Johnson et al describes that by employing such configuration, when a stress is

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applied, the adhesion to the adhered is not damaged, but the performance of the whole can be enhanced.

Accordingly, it is clear that in Johnson et al the tie or primer layer is not provided for the purpose of preventing the migration of components from the foamed structure layer, as in the present invention. As a matter of course, Johnson et al neither teaches nor suggests the effect of preventing component transfer from the foamed structure layer.

In particular, the transfer of the component from the foamed structure to the pressure-sensitive adhesive layer does not occur within a short period of time, but is a phenomenon seen when used at high temperatures for a long period of time. In the present invention, the influence of the component being transferred is confirmed by evaluating the waterstop performance after standing at 80 °C for 60 days. However, in Johnson et al., though a preservation test is carried out at 70 °C or 37.8 °C at a relative humidity of 100% for 20 days at maximum. This type of test is not sufficient to confirm the transfer of the component. Further, with respect to the evaluation items, the breakage of the foamed structure is confirmed only by the Tensile and Elongation Test. Accordingly, from the disclosures and types of evaluations, it is clear that Johnson et al does not intend to prevent the transfer of the component from the foamed structure.

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The problem to be solved by the present invention is not to enhance the strength between the foamed structure layer and the pressure-sensitive adhesive layer. EP 0816462 neither discloses nor suggests the problem solved by Applicants' invention. Accordingly, one of ordinary skill in the art, when solving a problem of preventing the migration of components from the foamed structure layer would not turn to the disclosures of EP 0816462, which relates to a different problem. Further, Applicants respectfully submit that one of ordinary skill would not have combined the disclosures of EP 0816462 and Johnson as proposed by the Examiner. Even if the cited references are combined, it is respectfully submitted that it would not have been obvious to make Applicants' invention.

Ehrenberg et al discloses that closed cells may be effective for the waterstop. However, Ehrenberg et al does not disclose the multi-layer structure including the "subbing layer" as in the present invention. Accordingly, even a combination of EP 0816462 with Ehrenberg et al would not achieve the present invention.

For the above reasons, it is respectfully submitted that the subject matter of claims 1, 4-6 and 10-13 is neither taught by nor made obvious from the disclosures of EP 0816462 in view of Johnson et al and further in view of Ehrenberg et al and it is requested that the rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

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II. The Rejection Based on Nitto Denko Corporation in view of Johnson et al and Ehrenberg and further in view of Hartman et al

Claims 2-3 and 7-9 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Nitto Denko (EP 0816462) in view of Johnson and Ehrenberg and further in view of Hartman et al.

Applicants respectfully submit that the present invention is not obvious over the disclosures of EP 0816462 in view of Johnson et al and Ehrenberg et al and further in view of Hartman et al and request that the Examiner reconsider and withdraw this rejection in view of the following remarks.

Hartman et al disclose a foamed structure which is provided with a different pressure-sensitive adhesive layer. However, the tape as disclosed in Hartman et al is an adhesive tape (tape for fixing flexographic printing plate), which is quite different from the waterstop sealing material as in the present invention. In Hartman et al, the reason why the foamed structure is the substrate resides in the matter that during fixing the soft printing plate to the printing cylinder via the adhesive tape, proper elasticity is imparted, an aspect of which is irrelevant to the matter as in the present invention, where waterstop performance is imparted. Accordingly, Applicants respectfully submit that the present invention is explicitly different from Hartman et al with respect to the utilization and the problem to be solved. Applicants respectfully submit that the teachings of Hartman et al do not overcome the deficiencies in the primary references as discussed in Section I above.

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In conclusion, Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art to combine Hartman et al with other cited references to achieve Applicants' claimed invention.

For the above reasons, it is respectfully submitted that the subject matter of claims 2-3 and 7-9 is neither taught by nor made obvious from the disclosures of EP 0816462 in view of Johnson et al and Ehrenberg et al and further in view of Hartman et al and it is requested that the rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

III. Conclusion

In view of the above, Applicants respectfully submit that their claimed invention is allowable and ask that the rejections under 35 U.S.C. §103 be reconsidered and withdrawn. Applicants respectfully submit that this case is in condition for allowance and allowance is respectfully solicited.

If any points remain at issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the local exchange number listed below.

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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